

## EXECUTIVE SUMMARY

Prepared February 13, 2002

**Mine Name:** Lone Pine Mine  
**Operator:** Gold Star Stone  
P.O. Box 62  
Oakley, Idaho 83346  
  
**Telephone:** (208) 862-9204 **Fax:** (208) 862-3807  
**Contact Person:** Bruce Mitchell

**I.D. No.:** M/003/050  
**County:** Box Elder County  
**New/Existing:** Status changing from  
Small mine to large mine LMO  
**Mineral Ownership:** FEE  
**Surface Ownership:** FEE  
**Lease No.(s):** N/A  
**Permit Term:** Life of Mine

**Life of Mine:** 20 years.

**Legal Description:** This Quarry is located in portions of the SE1/4 and the SW1/4 of the NE1/4 of Section 34, Township 14 North, Range 17 West, SLBM

**Mineral(s) to be Mined:** Quartzite Flagstone.

**Acres to be Disturbed:** 22.5 acres.

**Present Land Use:** Grazing, Wildlife Habitat.

**Postmining Land Use:** Grazing, Wildlife Habitat.

**Variances from Reclamation Standards (Rule R647) Granted:** A variance to rule R647-4-111.8: Reclamation of Roads is approved to leave the improved access road for continued use of the landowner. The landowner requested the improved road be left for his use, that after mining has ceased, in order to access his property.

### Soils and Geology

**Soil Description:** Soils in the project area are of the Parkay-Dateman Families Association (North Quarry area) and the Parkay-Broad Canyon Families Association (East Quarry area). These soils are classified as a gravelly loam to a very gravelly loam and range in depth from outcropping bedrock (Quartzite) to 22 inches deep.

**pH:** Soil reactivity ranges from 6.1-7.8 pH units

**Special Handling Problems:** None.

**Geology Description:** This project is located in the quartzite of the Clarks Basin Formation which is believed to be of very late pre-Cambrian to Cambrian age. It has been altered to a thin-layered quartz-mica schist.

### Hydrology

**Ground Water Description:** A small spring is present about 1,000 feet east of the project and about 300 feet lower elevation. There is also a small perched aquifer above the project area. A small pit was dug in this area which has standing water in the spring, but dries out by mid summer. The recharge for this area is within a few hundred feet to the west and 200 feet higher in elevation.

**Surface Water Description:** With the exception of the spring mentioned above, there are no surface waters in the vicinity of this project.

**Water Monitoring Plan:** None required.

### **Ecology**

**Vegetation Type(s); Dominant Species:** The project is located within the mountain shrub zone, and is dominated by mountain sagebrush. There are scattered clumps of serviceberry, mahogany and aspen in the area. The dominant grass in the area is fescue.

**Percent Surrounding Vegetative Cover:** Vegetative ground cover in the area was estimated to be 60%.

**Wildlife Concerns:** There are no known threatened or endangered species, or critical habitat for important wildlife species within the project area.

**Surface Facilities:** There are no permanent facilities associated with this project. There is a small camp area where camp trailers are parked to house work crew. A fuel tank has been located on site within a secondary containment structure that has a minimum 110% capacity of the fuel tank. Access to the quarry is across private lands which are fenced and signed as no trespassing.

### **Mining and Reclamation Plan Summary:**

#### **During Operations:**

After topsoil is salvaged, an excavator will be used to remove the quartzite from the highwall face and the floor of the pit. The quartzite is then sorted, split and stacked on pallets for shipping. Safety berms will be maintained above highwalls and dump slopes and along the access road. The access road is signed to keep unauthorized persons from entering the mine area.

#### **After Operations:**

All pits will be reclaimed by partial backfill of waste rock/overburden materials. Highwalls will be reduced to between 2h:1v to 3h:1v slopes. Topsoil will be respread at a 6-inch depth over areas that were disturbed by historic mining where soil salvage had not been required. Areas where topsoil was salvaged will be covered with 12 inches of topsoil. All compacted areas will be ripped to eliminate compaction. All areas will be seeded with an approved seed mixture that was developed for the post mining land use of grazing and wildlife habitat. The improved access road will remain as per the landowners request to access his property.

### **Surety**

**Amount:** \$77,300.00 (in 2007 dollars)

**Form:** Unknown at this time

**Renewable Term:** 5 years.

# RECLAMATION SURETY ESTIMATE

Gold Star Stone, Inc.

Lone Pine Quarry

DOGM file number M/003/050

Prepared by Utah State Division of Oil, Gas & Mining

last revision

08/02/00

filename M003-050.WB2

page "estimate D8"

Box Elder County

-This estimate uses a D8 size dozer for most earthwork

Note: actual unit costs may vary according to site conditions last unit cost update 2-Aug-00

-Amount of disturbed area which will receive reclamation treatments = 22.5 acres

-Estimated total disturbed area for this mine = 22.5 acres

Activity	Quantity	Units	\$/unit	\$	Note
Debris & equipment removal - loading trucks w/FE loader	2 hours		166	332	(5)
Demolition & debris removal - general labor	20 hours		15	300	(6)
					(11)
Pull sidecast dump material - trackhoe	2430 LF		1.15	2795	
Regrading waste dump slopes 4.95 ac X 2 ft depth	16000 CY		0.5	8000	(8)
Ripping waste dump tops	7 acre		234	1638	(9)
Ripping stockpile & compacted areas	4 acre		234	936	(9)
Ripping pit floors	6 acre		234	1404	(9)
Ripping associated areas prior to seeding	3 acre		234	702	
Ripping access roads - dozer	0.05 acre		234	12	(9)
Topsoil & Subsoil replacement - dozer	30500 CY		0.5	15250	(12)
Topsoil & Subsoil replacement - truck & FE loader	5000 CY		2.6	13000	(14)
Composted manure (10 ton/acre)	20 acre		300	6000	(00)
Broadcast seeding	20 acre		225	4500	(00)
General site cleanup & trash removal	10 acre		50	500	(00)
Equipment mobilization	3 equip		1000	3000	(00)
Reclamation Supervision	5 days		386	1930	(15)
	Subtotal			60298	
10% Contingency				6030	
	Subtotal			66328	
Escalate for 5 years at 3.12% per yr				11013	
	Total			77341	
Rounded surety amount in yr 2007-\$				77300	
Average cost per disturbed acre =				\$3,436	

# RECLAMATION SURETY ESTIMATE

(o:/data/bonding/mine-bnd.wb2)

Operator Name

last revision

08/02/00

Mine Name

filename M000-000.WB2

page "estimate D10"

DOGM file number

County

Prepared by Utah State Division of Oil, Gas & Mining

last unit cost update

2-Aug-2000

## Note

- (1) DOGM lump sum assumed
- (2) Means Heavy Construction Cost Data 2000, 02220-100-0100, mix of bldg. types, avg., excluding dump fees
- (3) Means 2000, 02225-730-5100, bldg demo, rubbish handling, \$0.50/CY permile for >8CY truck; assumed 100 miles round trip
- (4) Means 2000, 02225-740-0100, dump charges, typical urban city, tipping fees only, bldg construction mtl's
- (5) Rental Rate Blue Book 3Q/00, Cat 988B, 7CY \$85.64/hr+\$39.60/hr, & Means 2000, Crew B-10U, loading trucks only\$40.87
- (6) DOGM assumed wage for unskilled general labor
- (7) Means 2000 & Blue Book 3Q/00: Cat D10N, U, mtl 2550 lb/CY, 50 ft push, 1 ft depth
- (8) Means 2000 & Blue Book 3Q/00: Cat D10N, U, mtl 2550 lb/CY, 100 ft push
- (9) Means 2000 & Blue Book 3Q/00: Cat D10N, U, multi shank rippers, speed 1.0 mph
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- (7) Means 2000 & Rental Rate Blue Book 3Q/00: Cat D10N, U, mtl 2550 lb/CY, 75 ft push, 1 ft depth
- (11) Contractor's actual costs, 1991 at E/053/012 escalated to 2000-\$, Cat 225 Excavator, 20 ft wide road
- (10) Means 2000 & Blue Book 3Q/00: Cat D10N, U, mtl 2550 lb/CY, 50 ft push, avg vol 0.5CY/LF-berm assumed
- (12) Means 2000 & Blue Book 3Q/00: Cat D10N, U, mtl 2550 lb/CY, 100 ft push
- (13) Means 2000 & Blue Book 3Q/00: Cat 627F P-P, mtl 2550 lb/CY, 2,000 ft haul one-way, grade +/- 4%,
- (14) Means 2000 02320-200-2030: earthwork, hauling excavated or borrow material, off highway hauler, 22 CY, 1 mile round trip, no loading included
- (00) DOGM general estimate - mulching
- (00) DOGM general estimate - fertilizing
- (00) DOGM general estimate - manure \$16/ton delivered, \$14 ton/acre spreading
- (00) DOGM general estimate - broadcast seeding
- (00) DOGM general estimate - drill seeding
- (00) DOGM general estimate - hydroseeding
- (00) DOGM general estimate - site cleanup & trash removal
- (00) DOGM general estimate - equipment mobilization
- (15) Means 2000, 01300-700-0180, project manager, minimum \$1,930/wk